

CHAPTER 4

PERSONAL PROPERTY TABLES

The personal property tables chapter contains the replacement cost factors, economic life estimates, and percent good tables that are provided to assist county assessors in valuing personal property by the cost approach. The level of value adjustment factors are provided pursuant to § 39-1-104(12.3), C.R.S., and must be used to factor assessment date actual values of personal property to the level of value (as of the appraisal date) in effect for real property.

The tables and factors published here are subject to verification in the marketplace. All cost approach value estimates are based upon the factors and tables found in this section. Cost approach value estimates must be reconciled to the market and income approaches to value based upon the appraiser's opinion as to the reliability of the information used to derive the value estimates from each approach. Reconciliation of the applicable approaches to value is required for the valuation of all personal property in Colorado.

Actual Value Determined When.

(13)(a) ...the cost approach shall establish the maximum value of property if all costs incurred in the acquisition and installation of such property are fully and completely disclosed by the property owner to the assessing officer.

(c) ...However, nothing in this subsection (13) shall preclude the assessing officers from considering the market approach or income approach to the appraisal of personal property when such considerations would result in a lower value of the property and when such valuation is based on independent information obtained by the assessing officers.

§ 39-1-103(13), C.R.S.

Counties that develop in-house trending or depreciation tables must submit them annually for approval to the Statutory Advisory Committee to the Property Tax Administrator prior to use.

As the property under appraisal ages, the cost approach becomes less indicative of the property value. After fifteen years of age, the recommended valuation procedure is to measure the value of depreciated equipment directly in the marketplace, if possible.

COST FACTOR TABLES

The replacement cost factor tables are provided to assist the assessor in the determination of replacement cost new estimates by multiplying original or historical cost of personal property by the cost price indexes published and made available through the courtesy of the Marshall Swift Publication Company. When the original cost is multiplied by the factor for the year of acquisition, the product will approximate the current cost to replace, or the Replacement Cost New (RCN), of the personal property being appraised with property having similar utility.

The assessor must select the appropriate industry category number that corresponds to the type of equipment being appraised. Thirteen industry category numbers are supplied. In many instances, the individual industry category covers more than one type of commercial or industrial property. Specific types of commercial and industrial property are found in each industry category.

If the property to be factored can be specifically identified, the appropriate specific industry category (such as 3 for office equipment) should be applied. If the property cannot specifically be identified, the industry category for the business type may be used. If property is generally useful in many types of business activities, the predominant use shall determine the industry category.

If particular property types are not included in the table, a comparable property type industry category number may be selected. The “average of all” (industry category number 1) should be selected if the specific property type is not included in any of the industry categories.

After selecting the appropriate industry category number, the assessor uses the specific cost factor that corresponds to the year of acquisition of the equipment. The original cost of the equipment is then multiplied by the cost factor to arrive at the estimated replacement cost new (RCN) as of the assessment date.

Example:

Personal Property	Industry Number	Acquisition Year	Cost	Cost Factor	RCN
Desk	3	2000	\$1,500	1.12	\$1,680

In other words, it would cost \$1,680 on the current assessment date to replace an office desk purchased in 2000 for \$1,500.

INDUSTRY CATEGORY NUMBERS

Types of Personal Property Included in Industry Categories

Industry Category Table	
Industry Category Number	Property Type
1	Average of All
2	Candy and Confectionery, Creamery and Dairy, Flour, Cereal and Feed, Garage, Meat Packing, Paint, Refrigeration and Rubber
3	Office Equipment, (excluding copiers), and Office Furniture
4	Retail and Wholesale Stores, Warehousing
5	Rental Furnishings, Apartments, Hotels and Motels
6	Banks, Savings and Loans, Restaurants and Lounges, and Theaters
7	Contractors' Equipment
8	Laundry & Cleaning Equipment
9	Bakery, Bottling, Canneries, and Fruit Packing
10	Brewing and Distilling, Cement, Clay Products, Glass, Metal, Logging, Metal Working, Mining and Milling
11	Chemical, Electrical Equipment, Manufacturing, Paper, Motion Pictures and Television, Printing, and Woodworking
12	All Petroleum, and Textile
13*	Computer and PC Equipment, Computer-integrated Equipment, Telephone and Telecommunication Equipment, and Copiers

Source: Marshall & Swift, October 2005

*Please refer to **Chapter 7, Special Issues**, under *Classification and Valuation of Personal Computers (PCs) and Other Equipment*, for more information.

2006 REPLACEMENT COST NEW FACTORS

**2006 PERSONAL PROPERTY
COST FACTOR TABLE**

Year Acquired	Industry Category Number					
	1	2	3	4	5	6
1980	1.96	1.93	1.81	1.95	1.92	1.86
1981	1.78	1.74	1.66	1.78	1.75	1.71
1982	1.70	1.66	1.60	1.71	1.69	1.65
1983	1.67	1.63	1.56	1.67	1.66	1.61
1984	1.62	1.59	1.52	1.62	1.61	1.56
1985	1.60	1.56	1.50	1.60	1.58	1.54
1986	1.59	1.55	1.48	1.58	1.57	1.52
1987	1.56	1.53	1.46	1.55	1.54	1.50
1988	1.50	1.47	1.40	1.49	1.48	1.44
1989	1.42	1.40	1.33	1.41	1.40	1.37
1990	1.39	1.36	1.30	1.38	1.36	1.34
1991	1.36	1.33	1.28	1.35	1.34	1.32
1992	1.34	1.32	1.27	1.33	1.31	1.30
1993	1.32	1.29	1.25	1.30	1.28	1.27
1994	1.28	1.26	1.22	1.25	1.24	1.23
1995	1.24	1.22	1.19	1.22	1.20	1.20
1996	1.22	1.20	1.17	1.20	1.18	1.19
1997	1.20	1.18	1.15	1.18	1.16	1.17
1998	1.19	1.17	1.15	1.17	1.15	1.16
1999	1.18	1.17	1.14	1.17	1.15	1.16
2000	1.16	1.15	1.12	1.15	1.13	1.14
2001	1.15	1.14	1.12	1.14	1.12	1.13
2002	1.15	1.13	1.11	1.13	1.11	1.12
2003	1.13	1.12	1.10	1.12	1.09	1.11
2004	1.09	1.08	1.07	1.08	1.07	1.07
2005	1.00	1.00	1.00	1.00	1.00	1.00

Source: Marshall & Swift, October 2005

2006 REPLACEMENT COST NEW FACTORS CONTINUED

**2006 PERSONAL PROPERTY
COST FACTOR TABLE**

Year Acquired	Industry Category Number						
	7	8	9	10	11	12	13
1980	1.98	1.96	1.96	1.96	1.87	1.98	1.00
1981	1.78	1.78	1.78	1.77	1.70	1.77	1.00
1982	1.68	1.70	1.70	1.68	1.65	1.66	1.00
1983	1.65	1.67	1.68	1.65	1.62	1.64	1.00
1984	1.61	1.62	1.64	1.61	1.58	1.61	1.00
1985	1.59	1.60	1.62	1.59	1.56	1.60	1.00
1986	1.58	1.59	1.61	1.58	1.55	1.60	1.00
1987	1.56	1.56	1.58	1.56	1.53	1.59	1.00
1988	1.51	1.50	1.51	1.51	1.45	1.53	1.00
1989	1.44	1.42	1.43	1.44	1.37	1.45	1.00
1990	1.40	1.39	1.39	1.40	1.34	1.42	1.00
1991	1.36	1.36	1.37	1.37	1.33	1.38	1.00
1992	1.34	1.34	1.35	1.36	1.33	1.37	1.00
1993	1.30	1.32	1.33	1.34	1.31	1.36	1.00
1994	1.27	1.28	1.30	1.31	1.28	1.33	1.00
1995	1.24	1.24	1.25	1.27	1.22	1.28	1.00
1996	1.22	1.22	1.23	1.24	1.21	1.26	1.00
1997	1.19	1.20	1.21	1.23	1.20	1.24	1.00
1998	1.18	1.19	1.20	1.21	1.19	1.22	1.00
1999	1.17	1.19	1.20	1.21	1.20	1.21	1.00
2000	1.15	1.17	1.18	1.19	1.18	1.20	1.00
2001	1.14	1.16	1.17	1.18	1.17	1.18	1.00
2002	1.13	1.15	1.16	1.17	1.17	1.17	1.00
2003	1.12	1.13	1.14	1.15	1.15	1.15	1.00
2004	1.09	1.09	1.10	1.10	1.10	1.11	1.00
2005	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Source: Marshall & Swift, October 2005

2006 COST INDEX - FIXTURES/LEASEHOLD IMPROVEMENTS

June 30, 2004 Level of Value

This cost index is provided to assist the assessor in relating original or historical costs of fixtures or leasehold improvements to the real property level of value. The property may be valued using real property appraisal records for computations and should be assessed to the owner of record.

When using this method of valuation, the property must be classified and abstracted as real property improvements. The factors are useful only in the cost approach when attempting to factor historical costs to the correct level of value. All cost approach value estimates must be reconciled to the sales comparison (market) and income approaches to value as with other real property improvements. The factors found in this table are for estimating replacement costs only and do not include an allowance for depreciation.

**2006 FIXTURES/LEASEHOLD IMPROVEMENTS
COST FACTOR TABLE**

Year Acquired	Factor
1980	1.99
1981	1.87
1982	1.81
1983	1.75
1984	1.67
1985	1.64
1986	1.63
1987	1.62
1988	1.58
1989	1.55
1990	1.51
1991	1.50
1992	1.47
1993	1.40
1994	1.35
1995	1.31
1996	1.30
1997	1.26
1998	1.24
1999	1.21
2000	1.14
2001	1.13
2002	1.11
2003	1.08
2004	1.00
2005	0.94

Source: Marshall & Swift, October 2005

AVERAGE ECONOMIC LIFE ESTIMATES

The average economic life estimates are provided for assistance in applying the percent good depreciation tables for each type of property being valued. The economic life recommendations are based upon the Class Life Asset Depreciation Range published by the Internal Revenue Service, Marshall and Swift Co., and other sources. Further information about the estimates may be found in I.R.S. publication 946, "How To Depreciate Property", available from the I.R.S.

The economic life estimates are based on average national service lives and assume normal use and maintenance of the property. Use of the appropriate economic life estimate accounts for typical physical depreciation and functional/technological obsolescence for the personal property within the valuation process. Use of economic lives that differ from those in the estimates must be documented with specific market information. Counties and taxpayers are encouraged to provide this documentation for review by the Division of Property Taxation for possible update of existing published lives.

For specific types of equipment, economic life estimates were developed based on studies completed by the Division of Property Taxation.

PROPERTY TYPE	Recommended Economic Life (years)
COMMERCIAL	
<i>Wholesale Trade Level</i>	
Wholesale trade machinery equipment, and furnishings	9
<i>Retail Trade Level</i>	
Retail trade machinery equipment, and furnishings	9
<i>Service Trade Level</i>	
Adding machines, calculators	6
All terrain vehicles (ATVs) For addt'l info., see Chapter 7	6
Amusement parks	12
<i>Automated teller machines (ATMs): see Chapter 7</i>	
Computer/electronic components/portion	4*
Structural housing	10
Auto repair shops	10
Bank vault doors	20
Barber and beauty shops	10
<i>Cable television:</i>	
Digital TV set-top boxes	4*
Subscriber converters, other than digital	5
Test equipment	8
Origination equipment	9
Satellite receiving ground stations	9
Distribution & subscriber connection equipment	10
Headend equipment	11
Microwave systems	9
Computers – personal & accessories	3*
Computers – other & stand-alone peripherals	4*
Computer – integrated machinery & equipment	4
Construction equipment, general	6
Copiers and duplicators	6**
Data handling equipment, except computers	6
Electronic equipment, except computers	6
<i>Gaming: see Chapter 7</i>	
Electronic (e.g. slot machines)	5
Larger gaming personal property (e.g. tables)	10
<i>Gas station equipment:</i>	
Electronic fuel pumps	6
General	10
Tanks (e.g. above ground, propane, septic)	10
Tanks (e.g. below ground, double-walled, fuel)	20
Hydroelectric Generators	20
Golf carts	6
Laundry and dry cleaning	10
<i>Commercial Continued on next page</i>	

* Use appropriate computer percent good table 2006.

** Use the copier percent good table 2006.

Source: Division of Property Taxation, Marshall & Swift, & I.R.S.

PROPERTY TYPE	Recommended Economic Life (years)
COMMERCIAL (continued)	
<i>Service trade level (continued)</i>	
<i>Medical equipment:</i> For add'l info. see Chapter 7	3 to 10
Meter and stamp equipment	6
Office furniture	10
Pedicabs	10
Photo processing equipment (Electronic)	6
Port-a-potty	10
Radio and television broadcasting	6
Recreation and amusement	10
Restaurant and bar (all)	10
River Rafts	10
Shopping carts	5
Signs (Billboard)	20
Signs (other) by typical business life	
<i>Snow cats:</i> For add'l info. see Chapter 7	
Heavy use (e.g. snowgrooming operations)	6
Moderate use (e.g. transportation operations)	10
<i>Storage tanks:</i>	
Tanks (e.g. above ground, propane, septic)	10
Tanks (e.g. below ground, double-walled, fuel)	20
Telecommunication machinery and equipment	4
Theater	10
Telecommunication towers	20
Typewriters	6
Vending machines	10
Video machines (arcade)	6
RESIDENTIAL/COMMERCIAL	
Residential rental furnishings	10
Apartment, hotel and motel furnishings	10
NATURAL RESOURCES	
<i>Mining-Metallic and Nonmetallic</i>	
Mining, quarrying, & milling equipment	10
<i>Petroleum and Natural Gas</i>	
Exploration, drilling	6
Production (Excluding pipelines)	14
Marketing, retail	9
Refining	16
<i>Timber</i>	
Logging	6
Sawmills, permanent	10
Sawmills, portable	6

Source: Division of Property Taxation, Marshall & Swift, & I.R.S.

PROPERTY TYPE	Recommended Economic Life (years)
INDUSTRIAL	
<i>Manufacturing Trade Level</i>	
Aerospace	10
Apparel and fabricated textiles	9
Bakeries and Confectionery	12
Brewery	12
Canneries and frozen food	12
Cement manufacture	20
Cereal, flour, grain and mill products	17
Chemicals and related products	10
Clay and gypsum products	15
Concrete manufacture	15
Dairy products manufacturing	12
Electrical equipment manufacturing	10
Electronic equipment manufacturing	6
Fabricated metal products	12
Special tools	3
Food and beverage production	12
Special handling devices	4
Forklifts	10
Glass and glass product	14
Special tools	3
Jewelry	12
Lumber, wood products and furniture	10
Machinery (not otherwise listed in this section)	10
Meat packing	12
Motion picture and television production	12
Paint and varnish	10
Plastics and plastic products	11
Special tools	3
Printing and publishing	11
Professional and scientific instruments	10
Paperboard and pulp	10
Rubber products	14
Special tools	4
<i>Semi-conductor manufacturing:</i>	
General	5
Research and development	3
Test equipment	5
Wafer fabrication	3
Soft drink bottling	12
Steel and related products	15
Stone products	15
Sugar and sugar products	18

Source: Division of Property Taxation, Marshall & Swift, & I.R.S.

PERCENT GOOD TABLE

The personal property percent good table is provided to assist the assessor in estimating the replacement cost new less normal depreciation (RCNLD). The column headings represent the average service life expectancy of the personal property being appraised. Each column contains the percent good factor for a specified age in the life of the property.

Percent good tables measure the value remaining in personal property. Depreciation tables measure the loss in value at a specified age. The factor shown in the columns of the percent good table represents the percentage of RCN remaining at a specified age. The general percent good tables are built upon the following assumptions:

1. Iowa State University property retirement & depreciation studies
2. A specified rate of return
3. Average condition and usage of typical property

The general percent good table is generic in nature. It was designed to be generally useful for the majority of personal property. It is not specific to any particular industry or type of personal property.

The table was designed to account for normal physical depreciation. Use of the table with the appropriate economic life estimate accounts for typical physical depreciation and functional/technological obsolescence for the personal property within the valuation process. Additional functional/technological and/or economic obsolescence may also exist. If documented to exist, additional functional and economic obsolescence must be measured in the marketplace either using the market approach or rent loss methods. In addition, any adjustments to the percent good due to the condition of the subject property must be defensible and documented.

The minimum percent good shown for each of the columns is useful as a guide to residual value. It is not absolute and must be reconciled with market information for similar types of property in order to be valid. If the market shows that the actual value of personal property is lower than the value arrived at by using the minimum percent good, the use of the minimum percent good should be rejected in favor of the lower value. The actual value of the personal property must be determined as long as the property is still in use.

If the cost-calculated value is lower than the market and/or income approach, when the personal property reaches its minimum percent good, the assessor should review the original cost, all assigned factors, the physical condition of the property, and other pertinent contributors to value. If these are correct, the assessor must use the cost approach value as the actual value of the property pursuant to § 39-1-103(13)(a), C.R.S.

As the personal property under appraisal ages, the cost approach becomes less indicative of the property value. After fifteen years of age, the recommended valuation procedure is to measure the value of depreciated equipment directly in the marketplace, if possible.

To use the table, the assessor must determine the economic life and the effective age of the subject property. The percent good may be determined by moving across the columns until the one specified for the economic life is reached and then down this column to the point that reflects the effective age of the property.

Example:

Personal Property	Economic Life	Age	RCN	Percent Good	RCNLD
Desk	10 years	6 years	\$1,680	54%	\$907

The assessor must also consider functional and economic obsolescence, abnormal physical condition, or other factors that might affect the value of the equipment. The assessor should also consider the frequency and extent of maintenance to the property. Extensive maintenance or reconditioning of the property may extend the economic life of the property just as a lack of maintenance may shorten the economic life.

DEPRECIATED VALUE FLOOR

In the year in which the personal property has reached its minimum percent good, the applicable Replacement Cost New (RCN) trending factor in use at that time is "frozen" and the Level of Value (LOV) adjustment factor is "frozen" at 1.0. For the assessment years that follow, the RCNLD value does not change until the personal property is permanently taken out of service. An exception to this rule applies when the property has been reconditioned to extend its remaining economic life.

Even though the personal property has been permanently taken out of service, but has not been scrapped or sold, it still has value. However, additional functional and/or economic obsolescence may exist.

It is possible that the market or income approach may indicate a lower value than the personal property's minimum percent good. In addition, as property ages, the use of original installed cost multiplied by trending factors may not yield reasonable RCN values. Any RCNLD estimate should be crosschecked with sales comparison (market) and income information sources, if possible, and the appropriate value used.

VALUATION OF USED PERSONAL PROPERTY

The valuation of used personal property requires that a decision be made concerning the remaining economic life of the property. If the personal property's elapsed age from its actual year of manufacture, or estimated effective year of manufacture, is equal to or greater than the number of years in which the personal property would have reached its fully depreciated value floor, then the price paid for the personal property is to be treated as RCNLD and "frozen" at that value. RCN trending and percent good factors will not be applied to the frozen value. The LOV adjustment factor is "frozen" at 1.0 and will remain 1.0 until the property is taken out of service, sold, or retired.

An exception to this rule applies when the personal property is reconditioned to extend its remaining economic life. Then the reconditioned property is treated as new personal property and the formerly frozen value is treated as acquisition cost that is subject to depreciation over a complete economic life of the personal property.

Even though personal property has been permanently taken out of service, but has not been scrapped or sold, it still has value. However, additional functional and/or economic obsolescence may exist.

If the elapsed age from the year of manufacture, or estimated effective year of manufacture, is less than the number of years when the personal property would have reached its depreciated value floor, as evidenced in its recommended economic life from the preceding tables, then the property is treated as new personal property and the owner's acquisition cost is subject to depreciation over the complete economic life as would be used for new personal property. However, the resulting value should be compared to the sales comparison (market) value for the personal property, if possible.

2006 GENERAL PERCENT GOOD TABLE

	AVERAGE ECONOMIC LIFE IN YEARS																	
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
EFFECTIVE AGE	1	68	77	83	86	89	91	92	93	94	95	96	96	97	97	98	98	98
	2	39	55	65	72	77	81	84	86	88	89	91	92	93	94	94	95	95
	3	18	34	47	57	64	70	75	78	81	84	86	87	89	90	91	92	93
	4	15	19	32	43	52	60	66	70	74	78	80	83	85	86	88	89	90
	5		15	19	31	40	50	56	62	67	71	75	78	80	82	84	86	87
	6			15	20	30	39	47	54	60	65	69	73	75	78	80	83	84
	7				15	21	31	39	46	53	58	63	67	70	74	76	79	81
	8					15	22	31	38	45	51	56	62	66	69	72	75	78
	9						15	23	31	37	44	50	56	60	64	68	71	74
	10							15	24	31	38	44	49	55	60	63	67	71
	11								15	25	31	38	44	50	55	58	63	67
	12									21	26	31	38	44	49	53	58	63
	13									15	23	27	34	38	44	48	53	59
	14										15	24	28	35	40	44	50	54
	15											19	23	29	35	41	46	50
	16											15	21	24	30	36	41	46
	17												15	23	25	31	37	42
	18													15	25	27	32	37
	19														21	23	28	33
	20														15	19	24	30
	21															18	21	26
	22															15	17	23
	23																15	20
	24																	15
	25																	
	26																	

Source: Division of Property Taxation

Using market studies, the following table has been developed for **Personal Computers (PCs) and Accessories:**

Percent Good Table 2006

Average Economic Life		
<u>Age</u>		<u>3</u>
EFF	1	44
	2	23
A	3	13
G	4	7
E		

Source: Division of Property Taxation

Using market studies, the following table has been developed for **Other Computer Equipment Including Computer Peripherals:**

Percent Good Table 2006

Average Economic Life		
<u>Age</u>		<u>4</u>
EFF	1	50
	2	36
A	3	22
G	4	13
E	5	7

Source: Division of Property Taxation

For personal property classified as Computer-integrated Machinery and Equipment, a four (4) year economic life is assigned. The four (4) year life depreciation table found in the General Percent Good Table in this section should be used.

If you have questions concerning personal computers (PCs) and accessories, other computer equipment including stand-alone computer peripherals, or computer-integrated machinery and equipment, please refer to **Chapter 7, Special Issues**, under ***Classification and Valuation of Personal Computers (PCs) and Other Equipment.***

Using market studies, the following table has been developed for **Copiers**:

Percent Good Table 2006

Average Economic Life		
Age		6
EFF	1	54
	2	46
A	3	36
G	4	32
E	5	29
	6	26
	7	20

Source: Division of Property Taxation

Copiers have a six (6) year economic life and should be “frozen” in the seventh year at the 20 percent good. In the seventh year the LOV adjustment factor is “frozen” at 1.0 and will remain 1.0 until the personal property is taken out of service, sold, or retired.

LEVEL OF VALUE ADJUSTMENT FACTORS

The following table contains the indexes for adjusting current actual value of personal property to the level of value (LOV) in effect for real property as specified by § 39-1-104(12.3)(a)(I), C.R.S. The procedure involves the multiplication of the assessment date actual value estimate by the appropriate LOV factor for the type of property being valued. When personal property reaches its fully depreciated value floor the actual value should be determined and frozen. The LOV adjustment factor is “frozen” at 1.0 and will remain 1.0 until the property is taken out of service, sold, or retired.

Example:

Personal Property	Industry Number	Age	RCNLD	LOV Factor	Actual Value
Desk	3	6 years	\$907	0.94	\$853

2006 PERSONAL PROPERTY LOV FACTOR TABLE
June 30, 2004 Level of Value

Industry Number	LOV Factor
1	0.92
2	0.93
3	0.94
4	0.93
5	0.94
6	0.93
7	0.93
8	0.92
9	0.92
10	0.91
11	0.91
12	0.91
13	1.00

Source: Division of Property Taxation and Marshall & Swift